

### **Amendments to the Claims**

The Listing of Claims presented below will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims**

1-46. **(Cancelled)**

47. **(New)** An array comprising:  
a support; and  
a library of chemical compounds attached to the support in a linear arrangement, the library being combinatorial in that its members can be generated via chemical reactions in which a first set of moieties is attached to a second set of intermediates so that a larger number of products is produced than different chemical reactions are performed.

48. **(New)** An array comprising:  
a support;  
a collection of chemical compounds linearly arranged along the support; and  
a geometric substrate about which the support is wrapped.

49. **(New)** The array of claim 48, wherein each of the chemical compounds is covalently attached to the support.

50. **(New)** The array of claim 47, further comprising a substrate about which the support is wrapped.

51. **(New)** An array comprising:  
a support; and  
a library of chemical compounds covalently attached to the support in a linear arrangement, wherein members of the library are related to one another by synthetic history, such

that each member of a first subset of compounds within the library shares a first common feature resulting from a first common chemical reaction, and each member of the first subset of compounds is separated from each next closest member by a first distance.

52. **(New)** The array of claim 51, wherein each member of a second subset of compounds within the library shares a second common feature resulting from a second common chemical reaction, and each member of the second subset of compounds is separated from each next closest member by a second distance, the second distance being different from the first distance.

53. **(New)** The array of claim 51, wherein the array comprises at least three subsets of compounds, wherein each member of a subset of compounds within the library shares a common feature resulting from a common chemical reaction, and each member of the subset of compounds is separated from each next closest member by a distance, the distance being a characteristic of the subset.

54. **(New)** The array of claim 51, 52, or 53, further comprising a geometric substrate about which the support is wrapped.

55. **(New)** The array of claim 48, 49, or 50, wherein the support is wrapped about the substrate in a spiral.

56. **(New)** The array of claim 54, wherein the support is wrapped about the substrate in a spiral.

57. **(New)** The array of claim 48 or 49, wherein the collection of chemical compounds comprises a library that is combinatorial in that its members can be generated via chemical reactions in which a first set of moieties is attached to a second set of intermediates so that a larger number of products is produced than different chemical reactions are performed.

58. (New) The array of claim 51, wherein the library of chemical compounds is combinatorial in that its members can be generated via chemical reactions in which a first set of moieties is attached to a second set of intermediates so that a larger number of products is produced than different chemical reactions are performed.